

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (currently amended): An antenna device (1, 1', 1"),
2 comprising:

3 at least one sheet-shaped support (2) which is folded
4 along at least one fold-line (3-8, 80-83), said support (2)
5 including:

6 at least one first support plane (10-13) adjacent to at
7 least one of said fold-lines (3-8, 80-83), which first
8 support plane (10-13) has at least one first antenna
9 structure (100) arranged for receiving or emitting
10 electro-magnetic radiation; and

11 at least one second support plane (10-13) adjacent to
12 at least one of said fold-lines (3-8, 80-83), which second
13 support plane (10-13) is positioned at an angle with respect
14 to the first support plane (10-13) and which second support
15 plane (10-13) has at least one second antenna
16 structure (100) arranged for receiving or emitting
17 electro-magnetic radiation.

1 Claim 2 (currently amended): An antenna device (1, 1', 1")
2 as claimed in claim 1, wherein

3 at least one of the first antenna structures (100) is
4 arranged for receiving or emitting electro-magnetic
5 radiation of a first ~~polarisation~~ polarization; and wherein

6 at least one of the second antenna structures (100) is
7 arranged for receiving or emitting electro-magnetic

radiation of a second ~~polarisation~~ polarization different from said first ~~polarisation~~ polarization.

Claim 3 (currently amended): An antenna device (1, 1', 1'') as claimed in claim 1 ~~or 2~~, wherein the support (2) is folded along at least two fold-lines (3-8, 80-83), and further comprises a base plane (15, 15a, 15b) adjacent to a side of a fold-line (3-8, 80-83), at least one of the first and second support plane (10-13) being adjacent to another side of that fold-line (3-8, 80-83); and

said base plane (15, 15a, 15b) being positioned at an angle with respect to the first and second support plane (10-13).

Claim 4 (currently amended): An antenna device (1, 1', 1'') as claimed in ~~any one of the preceding claims~~ claim 1, wherein the support (2) comprises an electrically isolating layer (20, 21).

Claim 5 (original): An antenna device (1, 1', 1'') as claimed in claim 4, wherein the electrically isolating-layer (20, 21) is made of a flexible material.

Claim 6 (currently amended): An antenna device (1, 1', 1'') as claimed in claim 4 ~~or 5~~, further comprising:

a first electrically conducting layer (22) at a first side of the electrically isolating layer (20, 21); and

and an electrically conducting layer (23) at a second side of the electrically isolating layer (20, 21) shaped into a feed (102).

1 Claim 7 (currently amended): An antenna device (1, 1', 1")
2 as claimed in claim ~~4,5 or 6~~, further comprising a second
3 electrically conductive layer (24) at the second side of the
4 electrically isolating layer (20,21) shaped into connecting
5 lines (105) for transmitting signals from or to the antenna
6 structure (100).

1 Claim 8 (currently amended): An antenna device (1,1', 1") as
2 claimed in claim 7, wherein
3 the feed (102) lies between a first electrically
4 isolating layer (20) and a second electrically isolating
5 layer (21); ~~and~~ and wherein
6 the connecting lines (105) are present at a side of the
7 second electrically isolating layer (21) facing away from
8 the first electrically isolating layer (20).

1 Claim 9 (currently amended): An antenna device (1, 1', 1")
2 as claimed in ~~claim 3 and any one of claims 6-8~~claims 3 and
3 6, wherein the first conducting layer (22) extends at least
4 partially over at least a part of the base plane (15, 15a,
5 15b).

1 Claim 10 (currently amended): An antenna device (1, 1', 1")
2 as claimed in ~~any one of claims 6-9~~claim 6, further
3 comprising an amplifier element (103) positioned at the
4 second side, which amplifier element (103) is electrically
5 connected with a signal input to the feed (102) and is
6 connected with a reference input to a ground (104).

1 Claim 11 (currently amended): An antenna device (1, 1', 1")
2 as claimed in ~~any one of claims 6-10~~claim 6, wherein the
3 first conducting layer (22) is used as ground (104).

1 Claim 12 (currently amended): An antenna device (1, 1', 1")
2 as claimed in ~~any one of the preceding claims~~claim 1,
3 wherein the antenna structures (100) include flat antennas.

1 Claim 13 (original): An antenna device (1, 1', 1") as
2 claimed in claim 12, wherein the antenna structures (100)
3 include vertical antennas.

1 Claim 14 (original): An antenna device (1, 1', 1") as
2 claimed in claim 13, wherein the antenna structures (100)
3 include tapered slot antennas.

1 Claim 15 (currently amended): An antenna device (1, 1', 1")
2 as claimed in ~~any one of the preceding claims~~claim 1,
3 wherein the support (2) is folded along at least one of said
4 fold-lines (3-8, 80-83) such that at least one of the first
5 support plane (10-13), the second support plane (10-13), and
6 the base plane (15, 15a, 15b) is positioned substantially
7 perpendicular to at least one of the other planes.

1 Claim 16 (currently amended): An antenna device (1, 1', 1")
2 as claimed in claim 3 ~~and any one of the preceding claims~~,
3 wherein the base plane (15, 15a, 15b) is substantially
4 rectangular, said first support plane (10-13) is positioned
5 at a first side of the rectangular base plane (15, 15a, 15b)
6 and said second support plane (10-13) is positioned at a
7 second side of the rectangular base plane (15, 15a, 15b)
8 transverse to the first side.

1 Claim 17 (currently amended): An antenna device as claimed
2 in ~~any one of the preceding claims~~claim 1, wherein the
3 support plane is folded to a sleeve-like shape.

1 Claim 18 (currently amended): An antenna device as claimed
2 in ~~any one of the preceding claims~~claim 1, wherein at least
3 one of the antenna structures is connectable to further
4 signal processing devices outside the antenna device via a
5 non-contact connection, such as a capacitive or an inductive
6 connection.

1 Claim 19 (currently amended): An antenna array (30)
2 comprising at least two antenna devices (1', 1'') as claimed
3 in ~~any one of the preceding claims~~claim 1.

1 Claim 20 (currently amended): An antenna array (30) as
2 claimed in claim 19, comprising at least one sheet shaped
3 support member (200, 201) which is folded along at least two
4 fold-lines (3-8, 80-83) to obtain at least two antenna
5 devices (1, 1', 1'') as claimed in ~~any one of claims 1-~~
6 ~~17~~claim 1.

1 Claim 21 (original): An antenna array as claimed in
2 claim 20, wherein the sheet shaped supports (200, 201) are
3 connected to each other at or close to at least one of the
4 fold-lines (3-8, 80-83).

1 Claim 22 (currently amended): An intermediate product (40)
2 for an antenna device (1, 1', 1'') and/or an antenna
3 array (30) as claimed in ~~any one of the preceding~~
4 ~~claims~~claim 1, comprising:

5 a sheet shaped support (2, 200, 201) with a first
6 structure and a second structure, which sheet shaped
7 support (2, 200, 201) is foldable along a fold-line, by
8 means of which folding a first support plane (10-13) with
9 said first structure and a second support plane (10-13) with

10 said second structure can be obtained, which first structure
11 and second structure after folding the support (2,_200, 201)
12 form at least a part of the first and second antenna
13 structures (100).

1 Claim 23 (currently amended): A method for manufacturing an
2 antenna device (1, 1', 1") or an antenna array as claimed in
3 ~~any one of claims 1-21~~claim 1, comprising:

4 folding at least one sheet shaped support (2,_200, 201)
5 provided with at least two antenna structures (100) along at
6 least one fold-line, such that

7 at least one first support plane (10-13) adjacent to at
8 least one of said fold-lines (3-8,_80-83), which first
9 support plane (10-13) has at least one first antenna
10 structure (100) arranged for receiving or emitting
11 electro-magnetic radiation;

12 at least one second support plane (10-13) adjacent to
13 at least one of said fold-lines (3-8, 80-83), which second
14 support plane (10-13) is positioned at an angle with respect
15 to the first support plane (10-13) and which second support
16 plane (10-13) has at least one second antenna
17 structure (100) arranged for receiving or emitting
18 electro-magnetic radiation which differs in at least one
19 property from the electro-magnetic radiation which can be
20 received or emitted by said first antenna structure (100).